506.39084X00

REMARKS

By this Amendment, Applicants have amended claim 5 to be in independent form and have added claim 13 to further define their invention.

Claim 1 stands rejected under 35 USC §112, first paragraph. In support of this rejection, the Examiner alleges that "the specification, while being enabling for the production of histidine with strains derived from *Escherichia coli* FERM-BP-6673, does not reasonably provide enablement for the production of this amino acid with any *Escherichia coli* resistant to 150 mg/l of primaquine or alkali metal salts thereof." Applicants traverse this rejection and request reconsideration thereof.

The Examiner alleges at page 2 to 3 of the Office Action that:

> Undue experimentation would be required to practice the invention as claimed due to the quantity of experimentation to screen and select *Escherichia coli* strains that will be capable of producing histidine upon resistance to 150 mg/l of primaquine; limited amount of guidance and limited number of working examples in the specification related to this screening and selection process to show the requisite correlation thereof; the unpredictable nature of the invention; and breadth of the claims.

Further, the Examiner alleges the Abe "declaration does not address the unpredictability of obtaining histidine accumulating strains of *E. coli* merely by assessing their resistance to 150 mg/l primaquine or alkali metal salts thereof."

The claimed invention relates to a method of enhancing the productivity of L-histidine of a microorganism having an ability of producing L-histidine and having resistance to primaquine or alkali metal salts thereof. The method of obtaining the microorganism set forth in the present claims is described in the present specification.

The present specification shows that strain H-9341, which was obtained by

mutagenizing H-9340 strain and selecting a mutant microorganism having resistance to 150 mg/l primaquine disodium salt according to the method described in the present specification, can produce more L-histidine than H-9340. H-9340 does not have resistance to 150 mg/l primaquine disodium salt.

Abe's Declaration of September 9, 2003 shows that two strains (H-9341 strain and No. 1 strain), obtained by mutagenizing H-9340 strain and selecting mutant microorganisms having resistance to 150 mg/l primaquine disodium salt according to the method described in the present specification, produced more L-histidine than H-9340.

Applicants are submitting herewith an additional Declaration of Mr. Abe (Declaration Pursuant to 37 C.F.R. §1.132). The Declaration submitted herewith shows that a microorganism belonging to *Escherichia coli* which has an enhanced productivity of L-histidine can be obtained by newly imparting a resistance to 150 mg/l or more primaquine disodium salt to an L-histidine producing strain following the procedures described in applicants' specification.

Clearly, following the teachings in applicants' specification, one skilled in the art can practice the invention set forth in claim 1. Therefore, claim 1 is supported by an enabling disclosure.

Claim 5 is objected to as being dependent upon a rejected base claim. However, as shown above, Claim 5 has been amended to be an independent claim, and, therefore, the objection has been overcome.

In view of the foregoing amendments and remarks and the attached Declaration, it is submitted that the subject application is in condition for allowance.

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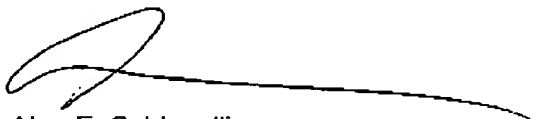
Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (referencing case no. 506.39084X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



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